That which is claimed is:

1. A method of facilitating vascular growth in cardiac muscle of a subject in need of such treatment, comprising:

inhibiting EMAP II activity in said subject by an amount effective to stimulate vascular growth in said cardiac muscle.

2. A method according to claim 1, wherein said inhibiting step is carried out by administering a compound that specifically binds to EMAP II to said subject in an amount effective to stimulate vascular growth in said cardiac muscle.

3. A method according to claim 2, wherein said compound is an antibody that specifically binds to EMAP II.

4. A method according to claim 1, wherein said inhibiting step is carried out by downregulating EMAP II expression in said subject by an amount effective to stimulate vascular growth in said cardiac muscle.

5. A method according to claim 4, wherein said downregulating step is carried out by administering an EMAP II antisense oligonucleotide to said subject in an amount effective to stimulate vascular growth in said cardiac muscle.

6. A method according to claim 1, wherein said inhibiting step is carried out by administering an EMAP II receptor antagonist to said subject in an amount effective to stimulate vascular growth in said cardiac muscle.

7. A method according to claim 1, wherein said subject is afflicted with myocardial ischemia.

8. A method according to claim 1, wherein said subject is afflicted with atherosclerosis.

9. A method according to claim 1, wherein said subject is afflicted with a myocardial disease.

10. A method according to claim 9, wherein said myocardial disease is cardiomyopathy or cardiac hypertrophy.

11. A method of facilitating vascular growth in cardiac muscle tissue of a subject in need of such treatment, said method comprising:

administering to said subject an active agent that inhibits EMAP II activity in said subject by an amount effective to promote blood vessel formation in said cardiac muscle.

12. A method according to claim 11, wherein said active agent is a compound that specifically binds to EMAP II.

13. A method according to claim 12, wherein said compound is an antibody that specifically binds to EMAP II.

14. A method according to claim 11, wherein said active agent is a compound that downregulates EMAP II expression.

15. A method according to claim 14, wherein said active agent is an EMAP II antisense oligonucleotide.

16. A method according to claim 11, wherein said active agent is an EMAP II receptor antagonist.

17. A method according to claim 11, wherein said subject is afflicted with myocardial ischemia.

18. A method according to claim 11, wherein said subject is afflicted with atherosclerosis.

19. A method according to claim 11, wherein said subject is afflicted with a myocardial disease.

20. A composition comprising isolated recombinant EMAP II having a shelf life of at least 1 year under frozen conditions.

21. A composition according to claim 20 having a shelf life of at least 2 years under frozen conditions.

22. A composition according to claim 20 having a shelf life of at least 1 year under refrigerated conditions.

23. A composition according to claim 20 having a shelf life of at least 2 years under refrigerated conditions.

24. A composition according to claim 20, wherein said composition is an aqueous composition.

25. A composition according to claim 20, wherein said composition is a lyophilized composition.

26. A composition according to claim 20, produced by the process of:

providing a cell lysate, said cell lysate comprising recombinant EMAP II;

passing said cell lysate through a nickel column at a temperature of 1° to 8° C so that recombinant EMAP II is bound to said nickel column; and then

eluting said recombinant EMAP II from said nickel column.

27. A composition according to claim 26, wherein said eluting step is followed by the step of dialyzing said recombinant EMAP II eluted from said nickel column.

28. A composition according to claim 27, wherein said dialyzing step is followed by the step of freezing said recombinant EMAP II.

29. A composition according to claim 27, wherein said providing step is carried out by lysing cells with a solution comprising sodium phosphate, sodium

chloride, imidazole and lysozyme, said step of passing said cell lysate through a nickel column is carried out at a temperature of 4°C, said eluting step is carried out washing said nickel column with a wash solution comprising sodium phosphate, sodium chloride, and imidazole, and said dialyzing step is carried out at 4°C against phosphate buffered saline solution.

30. A pharmaceutical formulation comprising isolated recombinant EMAP II according in a sterile pharmaceutically acceptable carrier, and having a shelf life of at least 1 year under frozen conditions.

31. A pharmaceutical formulation according to claim 30 having a shelf life of at least 2 years under frozen conditions.

32. A pharmaceutical formulation according to claim 30 having a shelf life of at least 1 year under refrigerated conditions.

33. A pharmaceutical formulation according to claim 30 having a shelf life of at least 2 years under refrigerated conditions.

34. A pharmaceutical formulation according to claim 30, wherein said formulation is an aqueous formulation.

35. A pharmaceutical formulation according to claim 30, wherein said formulation is a lyophilized composition.

36. A pharmaceutical formulation according to claim 30, wherein said EMAP II is produced by the process of:

providing a cell lysate, said cell lysate comprising recombinant EMAP II;

passing said cell lysate through a nickel column at a temperature of 1° to 8° C so that recombinant EMAP II is bound to said nickel column; and then

eluting said recombinant EMAP II from said nickel column.

37. A pharmaceutical formulation according to claim 36, wherein said eluting step is followed by the step of dialyzing said recombinant EMAP II eluted from said nickel column.

38. A pharmaceutical formulation according to claim 37, wherein said dialyzing step is followed by the step of freezing said recombinant EMAP II.

39. A pharmaceutical formulation according to claim 37, wherein said providing step is carried out by lysing cells with a solution comprising sodium phosphate, sodium chloride, imidazole and lysozyme, said step of passing said cell lysate through a nickel column is carried out at a temperature of 4°C, said eluting step is carried out washing said nickel column with a wash solution comprising sodium phosphate, sodium chloride, and imidazole, and said dialyzing step is carried out at 4°C against phosphate buffered saline solution.

40. A method of making recombinant EMAP II, comprising the steps of:

providing a cell lysate, said cell lysate comprising recombinant EMAP II;

passing said cell lysate through a nickel column under conditions in which said recombinant EMAP II is bound to said nickel column; and then

eluting said recombinant EMAP II from said nickel column.

41. A method according to claim 40, wherein said eluting step is followed by the step of dialyzing said recombinant EMAP II.

42. A method according to claim 41, wherein said said dialyzing step is followed by the step of freezing said recombinant EMAP II.

43. A method according to claim 42, further comprising the step of filtering said recombinant EMAP II after said dialyzing step and prior to said freezing step.

44. A method of treating a brain tumor in a subject in need of such treatment, comprising administering EMAP II to said subject in an amount effective to treat said brain tumor.

45. A method according to claim 44, wherein said subject is a human subject.

46. A method according to claim 44, wherein said EMAP II is administered in an amount ranging from 10 to 1000 micrograms per Kilogram.